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Search Results - Record(s) 1 through 3 of 3 returned.

☐ 1. Document ID: US 20020167632 A1

L22: Entry 1 of 3 File: PGPB Nov 14, 2002

PGPUB-DOCUMENT-NUMBER: 20020167632
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020167632 A1

TITLE: Lyotropic chromonic liquid crystals

PUBLICATION-DATE: November 14, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lavrentovich, Oleg D.	Kent	OH	US	
Ishikawa, Tomohiro	Cleveland	OH	US	

US-CL-CURRENT: 349/123

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

☐ 2. Document ID: US 6570632 B2

L22: Entry 2 of 3 File: USPT May 27, 2003

US-PAT-NO: 6570632
DOCUMENT-IDENTIFIER: US 6570632 B2

TITLE: Lyotropic chromonic liquid crystals

DATE-ISSUED: May 27, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lavrentovich; Oleg D.	Kent	OH		
Ishikawa; Tomohiro	Cleveland	OH		

US-CL-CURRENT: 349/84

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

☐ 3. Document ID: US 6411354 B1

WEST Search History

DATE: Wednesday, June 25, 2003

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR		
L22	l20 near30(analyte$ or l21 or biosensor$)	3	L22
L21	(ligand or ligands)near3(receptor$)	26824	L21
L20	(liquid)near2(crystal)near3(cell or cells)	25710	L20
L19	L18 and (biosensor$ or ligand$ or receptor$)	40	L19
L18	(l5 or l6)near3(cell or cells)near20(bilayer$ or multilayer$ or substrates or multisubstrat$)	7991	L18
L17	L16 near30 (l11 or biosensor$)	0	L17
L16	(l5 or l6)near3(cell or cells)near20(bilayer$ or nematic)	3422	L16
L15	(l5 or l6)near3(cell or cells)near20(bilayer$)	2	L15
L14	L13 near10 l11	293	L14
L13	l4 or l5 or l6	661297	L13
L12	L11 and l8	722	L12
L11	(ligand$ or receptor$)	196259	L11
L10	(self)near2 (assembl$)near2(monolayer$)	1311	L10
L9	(SAM or SAMS)	25411	L9
L8	l7 and (l1 or l2 or l3)	2491	L8
L7	l4 or l5	661297	L7
L6	(liquid)near2(crystal$)	322096	L6
L5	(liquid)near2(crystal$) or LC!	661008	L5
L4	(mesogen$)	2891	L4
L3	(regents)near4(california)	349	L3
L2	abbott	22815	L2
L1	Gupta	14752	L1

END OF SEARCH HISTORY

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Liq crystal display cell

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L19: Entry 20 of 40 File: USPT Aug 22, 2000

DOCUMENT-IDENTIFIER: US 6106906 A
**** See image for Certificate of Correction ****
TITLE: Material for forming electroconductive film, method of forming electroconductive film by using the same and method of manufacturing electron-emitting device, electron source and image-forming apparatus

Brief Summary Text (21):
A metal compound that would not allow two or more than two additional ligands to be coordinated may be used for a still alternative method of avoiding gellation of the mixture of polyamic acid and the metal or an organic compound of the metal. However, it is difficult to prepare and use a metal compound that has only one moiety for coordination when such additional ligands are prohibited from coordination. If no moiety is available for coordination in a metal compound, such a compound can hardly be mixed with polyamic acid to produce a desired mixture and the ingredients of the obtained mixture may more often than not be separated into different phases. Thus, it is very difficult to form a polyimide film containing a metal and/or the oxide thereof in an evenly dispersed state.

Detailed Description Text (36):
More specifically, a preferable organometallic compound is either a compound having one or two uncoordinated ligands or a compound saturated with ligands, of which one or two can easily be detached. Since polyamic acid ester and a metal can form a complex, a mixture of polyamic acid ester and a metal will be hereinafter referred to as polyamic acid ester-metal complex.

Detailed Description Text (177):
The following metal complexes and carboxylic acids were used as starting materials for ligand-exchange reactions of the metal complexes and then made to react with amines to produce organometallic complexes, from which 0.4Ms of organometallic complexes/chloroform solution were respectively as materials for forming an electroconductive thin film.

Detailed Description Text (237):
The specimen was then immersed in a mixed solvent of pyridine, acetic acid anhydride and benzene (1:1:10 in voluminal ratio) for 12 hours for imidization and elimination of ligands from the palladium compound. It was confirmed by an IR spectrum that the specimen was made of polyimide and palladium oxide. The electroconductivity of the specimen was found to be 6.times.10.sup.-7 S/cm.

Detailed Description Text (249):
Alumina beads having an average particle size of 1.5 .mu.m were sprayed on one of the substrate as spacers 4 and then the substrates were put together to form a liquid crystal cell such that the rubbing directions of the substrates are oppositely arranged in parallel with each other and show a degree of 10.degree. relative to the intraplanar direction (cross rubbing).

09/637,844

(FILE 'HOME' ENTERED AT 08:20:57 ON 25 JUN 2003)

FILE 'CAPLUS, EMBASE, BIOSIS, MEDLINE, WPIDS' ENTERED AT 08:21:05 ON 25 JUN 2003

L1	662	S	(ABBOTT, N? OR ABBOTT N?)/AU,IN
L2	5390	S	(GUPTA, V? OR GUPTA V?)/AU,IN
L3	6028	S	L1 OR L2
L4	85015	S	(RECEPTOR?)(2A)(LIGAND?)
L5	34257	S	(BIOSENSOR?)
L6	68953	S	(ANALYTE?)
L7	33	S	L3 AND (L4 OR L5 OR L6)
L8	19		DUP REM L7 (14 DUPLICATES REMOVED)
L9	225790	S	(LIQUID)(2A)(CRYSTAL?) OR MESOGEN?
L10	216	S	L9 AND (L4 OR L5 OR L6)
L11	44	S	L10 AND (CELL OR CELLS OR SAM OR SAMS OR MONOLAYER?)
L12	39	S	L11 NOT L3
L13	34		DUP REM L12 (5 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 08:33:09 ON 25 JUN 2003

FILE 'CAPLUS, EMBASE, BIOSIS, MEDLINE, WPIDS' ENTERED AT 08:34:11 ON 25 JUN 2003

L14	7432	S	(LIQUID)(2A)(CRYSTAL?)(3A)(CELL OR CELLS)
L15	7	S	L14 AND (ANALYTE? OR ASSAY? OR BIOSENSOR?)
L16	5		DUP REM L15 (2 DUPLICATES REMOVED)

L13 ANSWER 30 OF 34 CAPLUS COPYRIGHT 2003 ACS
AN 1991:243888 CAPLUS
DN 114:243888
TI Conductometric **biosensor** for use in organic solvents
IN Spohn, Uve; Miethe, Peter; Voss, Harald
PA Martin-Luther-Universitaet Halle-Wittenberg, Ger. Dem. Rep.
SO Ger. (East), 4 pp.
CODEN: GEXXA8
DT Patent
LA German
IC ICM G01N027-07
CC 9-1 (Biochemical Methods)
Section cross-reference(s): 80
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DD 278869	A1	19900516	DD 1988-324043	19881227
PRAI DD 1988-324043		19881227		

AB The title **biosensor** consists of a permeable support system (e.g. a polymer membrane or paper), a conductometric signal transducer, and between these a thin catalyst layer comprising a biocatalyst (enzyme, enzyme-labeled protein, **cells**, organelles, etc.) in a lyotropic mesophase which is insol. in, and chem. and phys. stable towards, the org. solvent. The mesophase consists of a ternary or pseudoternary surfactant/org. solvent/water system, where the org. solvent is immiscible with water. Thus, a **biosensor** comprised (1) a perfluorinated ethylene-propylene copolymer membrane on which 2 Pt electrodes were sputtered, covered by (2) a lyotropic mesophase 0.1-0.2 mm thick composed of polyoxyethylene 7-nonylphenyl ether 8.55, n-hexane 76.84, hog pancreas lipase 0.10 wt.%, and water, and (3) a double membrane comprising (a) a porous PTFE membrane with mean pore size 10-40 .mu.m and (b) a perforated PTFE membrane in contact with the org. solvent contg. the **analyte** (triglyceride). Hydrolysis of the triglyceride to fatty acids increased the cond. of the mesophase in a concn.-dependent manner.

ST **biosensor** conductometry org solvent; glyceride detn conductometry lipase sensor

IT **Biosensors**
(conductometric, for use in org. solvents)

IT Electric conductivity and conduction
(detn. of, **biosensor** for, for use in org. solvents)

IT Glycerides, analysis
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, in org. solvents, **biosensor** for)

IT Paper
(in **biosensor**, for use in org. solvents)

IT Alkanes, uses and miscellaneous
Cycloalkanes
Enzymes
RL: USES (Uses)
(in lyotropic liq. crystal in **biosensor** for use in org. solvents)

IT Animal **cell**
Microorganism
Organelle
Plant **cell**
(lyotropic liq. crystal contg., in **biosensor** for use in org. solvents)

IT Solvents
(org., conductometric **biosensor** for use in)

IT Surfactants
(anionic, in lyotropic liq. crystal in **biosensor** for use in org. solvents)

IT Electrodes

(bio-, enzyme, in conductometric **biosensor** for use in org. solvents)

IT Alkanes, uses and miscellaneous
RL: USES (Uses)
(branched, in lyotropic liq. crystal in **biosensor** for use in org. solvents)

IT Surfactants
(cationic, in lyotropic liq. crystal in **biosensor** for use in org. solvents)

IT Titration
(conductometric, **biosensor** for, for use in org. solvents)

IT Proteins, specific or class
RL: ANST (Analytical study)
(conjugates, with enzymes, lyotropic liq. crystal contg., in **biosensor** for use in org. solvents)

IT **Liquid crystals**
(lyotropic, in conductometric **biosensor**, for use in org. solvents)

IT Surfactants
(nonionic, in lyotropic liq. crystal in **biosensor** for use in org. solvents)

IT Enzymes
RL: USES (Uses)
(synthetic, in lyotropic liq. crystal in **biosensor** for use in org. solvents)

IT Surfactants
(zwitterionic, in lyotropic liq. crystal in **biosensor** for use in org. solvents)

IT 7732-18-5, Water, uses and miscellaneous
RL: USES (Uses)
(in lyotropic liq. crystal in **biosensor** for use in org. solvents)

IT 9001-62-1, Lipase
RL: ANST (Analytical study)
(liq. crystal contg., in **biosensor** for glyceride detn. in org. solvents)

IT 134120-92-6
RL: ANST (Analytical study)
(liq. crystal contg., in **biosensor** for use in org. solvents)

IT 71-43-2, Benzene, uses and miscellaneous 71-43-2D, Benzene, chloro and fluoro derivs. 88-99-3, Phthalic acid, uses and miscellaneous 108-88-3, Toluene, uses and miscellaneous 108-88-3D, Toluene, chloro and fluoro derivs. 123-86-4, Butyl acetate 123-86-4D, Butyl acetate, chloro and fluoro derivs. 1330-20-7, Xylene, uses and miscellaneous 1330-20-7D, Xylene, chloro and fluoro derivs.
RL: USES (Uses)
(lyotropic liq. crystal contg., in **biosensor** for use in org. solvents)

IT 9010-79-1D, Ethylene-propylene copolymer, fluoro derivs. 25067-11-2, Perfluoroethylene-perfluoropropylene copolymer
RL: ANST (Analytical study)
(membrane, in **biosensor** for use in org. solvents)

IT 9002-84-0, Polytetrafluoroethylene 24937-79-9, Poly(vinylidene difluoride)
RL: ANST (Analytical study)
(porous membrane, in **biosensor** for use in org. solvents)

=>

L13 ANSWER 21 OF 34 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN 96270008 EMBASE
DN 1996270008
TI A new approach for creating double-stranded DNA **biosensors**.
AU Skuridin S.G.; Yevdokimov Y.M.; Efimov V.S.; Hall J.M.; Turner A.P.F.
CS Engelhardt Molecular Biology Inst., Russian Academy of Sciences, Vavilova str. 32,117984 Moscow, Russian Federation
SO Biosensors and Bioelectronics, (1996) 11/9 (903-911).
ISSN: 0956-5663 CODEN: BBIOE4
CY United Kingdom
DT Journal; Article
FS 027 Biophysics, Bioengineering and Medical Instrumentation
029 Clinical Biochemistry
LA English
SL English
AB The principle of 'sandwich'-type **biosensors** based on **liquid-crystalline** dispersions formed from [DNA-polycation] complexes is outlined. These **biosensors** will find application in the determination of a range of compounds and physical factors that affect the ability of a given polycationic molecule to maintain intermolecular crosslinks between neighbouring DNA molecules. In the case of **liquid-crystalline** dispersions formed from [DNA-protamine] complexes, the lowest concentration of hydrolytic enzyme (trypsin) detectable was .apprx.10-14M.
CT Medical Descriptors:
***biosensor**
*dna determination
animal cell
article
chicken
cross linking
dna structure
liquid crystal
molecular interaction
nonhuman
Drug Descriptors:
*double stranded dna

L16 ANSWER 4 OF 5 MEDLINE
AN 88016618 MEDLINE
DN 88016618 PubMed ID: 2889228
TI Optical **biosensors** for immunoassays: the fluorescence capillary-fill device.
AU Badley R A; Drake R A; Shanks I A; Smith A M; Stephenson P R
CS Unilever Research, Colworth Laboratory, Sharnbrook, Bedford, U.K.
SO PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY OF LONDON. SERIES B: BIOLOGICAL SCIENCES, (1987 Aug 28) 316 (1176) 143-60.
Journal code: 7503623. ISSN: 0962-8436.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198711
ED Entered STN: 19900305
Last Updated on STN: 19990129
Entered Medline: 19871119
AB This paper reports, for the first time, details of a novel type of optical **biosensor** for immunoassays, the fluorescence capillary-fill device (FCFD). This is based on a straightforward adaptation of the technology used to mass manufacture **liquid-crystal** display (LCD) **cells** to give cheap disposable immunosensors. These merely require contact by the sample to give a result in about a minute, and use certain principles of optical fibres and waveguides to avoid the need for operator attention, for physical separation methods or for washing steps. After a very brief introductory review and classification of optical **biosensors**, the main features of the FCFD and its associated instrumentation are described. The optical characteristics of the FCFD are then described, followed by accounts of the immunoassay method, the measurement system used in the experiments, the fabrication of FCFD sensors and a detailed description of the design of a competitive immunoassay for human immunoglobulin G (hIgG). The experimental details and the results of a first attempt at such an **assay** are then presented and discussed. It is concluded that the demonstration of this **assay** is a significant achievement, because the format of the FCFD, its manufacturing process and its instrumentation are completely novel. Certain problem areas have been identified and quantified; intended further work on these is outlined.
CT Check Tags: Animal; Comparative Study; Human; Support, Non-U.S. Gov't
Autoanalysis
*Biotechnology
Biotechnology: IS, instrumentation
Chemistry, Clinical
Environmental Pollution
*Immunoassay: MT, methods

=>

L16 ANSWER 2 OF 5 WPIDS (C) 2003 THOMSON DERWENT
AN 1993-265863 [34] WPIDS
CR 1987-057975 [09]; 1992-143152 [18]; 1992-161105 [20]
DNN N1993-203918 DNC C1993-118464
TI Quality control device for clinical analyser - includes cartridge having liq. crystal cell and polarising filter to simulate particle-contg. fluid flow.
DC B04 J04 S03 V07
IN ALLEN, J D; COBB, M E; GIBBONS, I; HILLMAN, R S; OSTOICH, V E; WINFREY, L J
PA (BIOT-N) BIOTRACK INC; (BOEF) BOEHRINGER MANNHEIM CORP
CYC 11
PI EP 488994 A2 19920603 (199334)* EN 29p
R: AT BE CH DE FR GB IT LI LU NL SE
EP 488994 A3 19920701 (199334) 29p
EP 488994 B1 19960612 (199628) EN 6p
R: CH DE FR GB IT LI
DE 3650530 G 19960718 (199634)
ADT EP 488994 A2 EP 1992-103110 19860724; EP 488994 A3 EP 1992-103110 19860724; EP 488994 B1 Div ex EP 1986-110184 19860724, EP 1992-103110 19860724; DE 3650530 G DE 1986-3650530 19860724, EP 1992-103110 19860724
FDT EP 488994 A2 Related to EP 212314; DE 3650530 G Based on EP 488994
PRAI US 1986-880793 19860701; US 1985-762748 19850805
AB EP 488994 A UPAB: 19960719
A method for determining an **analyte** in a fluid medium uses a device comprising at least one capillary unit acting as the motive force for moving the fluid medium in the device, at least one chamber unit, an inlet port, an outlet port distant from the inlet port and a reagent contained within the device, the reagent being a member of a detection system, where the capillary acts as a metering pump and flow controller of the **assay** medium through the device to provide for a time controlled reaction with the reagent.

A fluid sample is introduced through the inlet port into one of the units, and the fluid allowed to transit from one unit to the next unit at a rate controlled by the capillary unit and react with the reagent resulting in a detectable signal produced by the detection system. Pref. the device is made from acrylonitrile -butadiene -styrene copolymer.

USE/ADVANTAGE - The method can be used with a wide variety of fluids, partic. physiological fluids, for detection of e.g. drugs, pathogens, glucose or serum enzymes. The devices provide for simple measurements of volumes, mixing of reagents, incubations and visual or instrumental determn. of the result.

USE/ADVANTAGE - Used e.g. for clinical analysers. Permits rapid and convenient checking.

Dwg.1A/8
Dwg.1A/8
Dwg.1A/8

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